



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2015-1983; Directorate Identifier 2015-NM-020-AD; Amendment 39-18388; AD 2016-03-01]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for all The Boeing Company Model 737-100, -200, -200C, -300, -400, and -500 series airplanes. This AD was prompted by a report of a crack of the forward leg of the left front spar lower chord and cracks on the lower wing skin at three fastener holes common to the nacelle outboard side load fitting. This AD requires repetitive inspections for cracks on the front spar lower chord, inspar skin, and wing skin, and corrective action if necessary. We are issuing this AD to detect and correct fatigue cracking of the forward leg of the front spar lower chord, inspar skin, and wing skin common to the nacelle outboard side load fitting, which could adversely affect the structural integrity of the wing.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707,

MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-1983.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-1983; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Docket Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Jennifer Tsakoumakis, Aerospace Engineer, Airframe Branch, ANM-120L, FAA, Los Angeles Aircraft Certification Office (ACO), 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5264; fax: 562-627-5210; email: jennifer.tsakoumakis@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to all The Boeing Company Model 737-100, -200, -200C, -300, -400, and -500 series airplanes. The NPRM published in the Federal Register on June 24, 2015 (80 FR 36258) (“the NPRM”). The NPRM was prompted by a report of a crack of the forward leg of the left front spar lower chord and cracks on the lower wing

skin at three fastener holes common to the nacelle outboard side load fitting. The NPRM proposed to require repetitive inspections for cracks on the front spar lower chord, inspar skin, and wing skin, and corrective action if necessary. We are issuing this AD to correct the unsafe condition on these products.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the NPRM and the FAA's response to each comment.

Support for the NPRM

Boeing stated that it concurs with the NPRM.

Effect of Winglets on Accomplishment of the NPRM

Southwest Airlines (SWA) requested clarification whether the installation of Aviation Partners Boeing (APB) Supplemental Type Certificate (STC) ST01219SE ([http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgstc.nsf/0/ebd1cec7b301293e86257cb30045557a/\\$FILE/ST01219SE.pdf](http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgstc.nsf/0/ebd1cec7b301293e86257cb30045557a/$FILE/ST01219SE.pdf)) has any affect to the ability of accomplishment of the action of this proposed AD (80 FR 36258, June 24, 2015). APB stated that the installation of winglets per STC ST01219SE does not affect the accomplishment of the manufacturer's service instructions.

We concur with APB's comment and agree to clarify. We have redesignated paragraph (c) of the proposed AD (80 FR 36258, June 24, 2015) as paragraph (c)(1) and added new paragraph (c)(2) to this AD to state that installation of STC ST01219SE ([http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgstc.nsf/0/ebd1cec7b301293e86257cb30045557a/\\$FILE/ST01219SE.pdf](http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgstc.nsf/0/ebd1cec7b301293e86257cb30045557a/$FILE/ST01219SE.pdf)) does not affect the ability to accomplish the actions required by this AD. Therefore, for airplanes on which STC ST01219SE is installed, a "change in product" alternative method of compliance (AMOC) approval request is not necessary to comply with the requirements of 14 CFR 39.17.

Request for Critical Design Configuration Control Limitation (CDCCL) Instructions

SWA requested that we add instructions to paragraph (i) of the proposed AD (80 FR 36258, June 24, 2015) to specify that important CDCCL information must be observed during access and close-up while performing the actions specified in paragraph (i) of the proposed AD. SWA explained that Boeing Alert Service Bulletin 737-57A1323, dated December 5, 2014, does not contain any references to CDCCLs, despite the required access to the fuel tank, in order to perform either option 1 or option 2 non-destructive test inspection requirements. SWA stated that the access and close-up steps indicate, as a reference, the maintenance planning document (section 4), which does not provide a clear path to the airplane maintenance manual section that addresses CDCCL requirements.

We agree with the commenter's request. Boeing Alert Service Bulletin 737-57A1323, dated December 5, 2014, does not contain any references to CDCCLs that are part of the airworthiness limitations (AWLs). All applicable AWLs must still be observed while performing the actions mandated by this AD. We have revised paragraph (i) of this AD to state that while accomplishing the actions required by paragraph (i) of this AD, operators must ensure that all applicable CDCCLs are complied with.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this AD with the changes described previously and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for correcting the unsafe condition; and

- Do not add any additional burden upon the public than was already proposed in the NPRM.

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this AD.

Related Service Information under 1 CFR part 51

We reviewed Boeing Alert Service Bulletin 737-57A1323, dated December 5, 2014. The service information describes procedures for repetitive inspections for cracks on the left and right wing front spar lower chord, inspar skin, and wing skin, and corrective action. The service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

We estimate that this AD affects 331 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

Estimated costs

| Action | Labor cost | Parts cost | Cost per product | Cost on U.S. operators |
|--|--|-------------------|--|--|
| Inspection (28 Group 2 airplanes) | 7 work-hours X \$85 per hour = \$595 per inspection cycle | \$0 | \$595 per inspection cycle | \$16,660 per inspection cycle |
| Inspection and fastener installation (302 Group 3 airplanes) | Up to 94 work-hours X \$85 per hour = \$7,990 per inspection cycle | \$0 | Up to \$7,990 per inspection cycle | Up to \$2,412,980 per inspection cycle |

We have received no definitive data that will enable us to provide cost estimates for the actions specified for the Group 1 airplane in this AD.

We also have received no definitive data that will enable us to provide cost estimates for the on-condition actions specified in this AD.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2016-03-01 The Boeing Company: Amendment 39-18388; Docket No. FAA-2015-1983; Directorate Identifier 2015-NM-020-AD.

(a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

(1) This AD applies to all The Boeing Company Model 737-100, -200, -200C, -300, -400, and -500 series airplanes, certificated in any category.

(2) Installation of Supplemental Type Certificate (STC) ST01219SE ([http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgstc.nsf/0/ebd1cec7b301293e86257cb30045557a/\\$FILE/ST01219SE.pdf](http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgstc.nsf/0/ebd1cec7b301293e86257cb30045557a/$FILE/ST01219SE.pdf)) does not affect the ability to accomplish the actions required by this AD. Therefore, for airplanes on which STC ST01219SE is installed, a "change in product" alternative method of compliance (AMOC) approval request is not necessary to comply with the requirements of 14 CFR 39.17.

(d) Subject

Air Transport Association (ATA) of America Code 57, Wings.

(e) Unsafe Condition

This AD was prompted by a report of a crack in the forward leg of the left front spar lower chord and cracks on the lower wing skin at three fastener holes common to the nacelle outboard side load fitting. We are issuing this AD to detect and correct fatigue cracking of the forward leg of the front spar lower chord, inspar skin, and wing skin common to the nacelle outboard side load fitting, which could adversely affect the structural integrity of the wing.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Inspections and Corrective Actions for Group 1 Airplanes

For Group 1 airplanes identified in Boeing Alert Service Bulletin 737-57A1323, dated December 5, 2014: Within 120 days after the effective date of this AD, do inspections of the left and right wing front spar lower chord and inspar skin, and the left and right wing nacelle outboard side load fitting fastener holes common to the front spar lower chord and skin, and do all applicable corrective actions, using a method approved in accordance with the procedures specified in paragraph (k) of this AD.

(h) Repetitive Detailed Inspections and Corrective Actions

For Group 2 and 3 airplanes identified in Boeing Alert Service Bulletin 737-57A1323, dated December 5, 2014: Except as provided by paragraph (j)(1) of this AD, at the applicable time specified in Table 1 of paragraph 1.E., “Compliance,” of Boeing Alert Service Bulletin 737-57A1323, dated December 5, 2014, do a detailed inspection for cracks on the left and right wing front spar lower chord and inspar skin, and do all applicable corrective actions, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 737-57A1323, dated December 5, 2014,

except as specified in paragraph (j)(2) of this AD. Do all applicable corrective actions before further flight. Repeat the inspection thereafter at the applicable interval specified in Table 1 of paragraph 1.E., “Compliance,” of Boeing Alert Service Bulletin 737-57A1323, dated December 5, 2014, except in areas repaired in accordance with the procedures specified in paragraph (k) of this AD.

(i) Repetitive High Frequency Eddy Current (HFEC) Inspections and Corrective Actions

For Group 3 airplanes identified in Boeing Alert Service Bulletin 737-57A1323, dated December 5, 2014: Except as provided by paragraph (j)(1) of this AD, at the applicable time specified in Table 2 or Table 3 of paragraph 1.E., “Compliance,” of Boeing Alert Service Bulletin 737-57A1323, dated December 5, 2014, do the actions specified in paragraphs (i)(1) or (i)(2) of this AD. Repeat the inspection specified in either paragraph (i)(1) or (i)(2) of this AD thereafter at the applicable interval specified in Table 2 or Table 3 of paragraph 1.E., “Compliance,” of Boeing Alert Service Bulletin 737-57A1323, dated December 5, 2014. While accomplishing the actions required by this paragraph, ensure that all applicable critical design configuration control limitations are complied with.

(1) Do an HFEC open hole probe inspection for cracks of the left and right wing nacelle outboard side load fitting fastener holes common to the front spar lower chord and skin, and perform all applicable corrective actions, in accordance with Part 2, Option 1 of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-57A1323, dated December 5, 2014, except as provided by paragraph (j)(2) of this AD. Do all applicable corrective actions before further flight.

(2) Do an HFEC surface probe inspection for cracks in the wing in spar skin, and perform all applicable corrective actions, in accordance with Part 2, Option 2 of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-57A1323, dated

December 5, 2014, except as provided by paragraph (j)(2) of this AD. Do all applicable corrective actions before further flight.

(j) Exceptions to Service Information Specifications

(1) Where paragraph 1.E., “Compliance,” of Boeing Alert Service Bulletin 737-57A1323, dated December 5, 2014, specifies a compliance time “after the original issue date of this service bulletin,” this AD requires compliance within the specified compliance time “after the effective date of this AD.”

(2) Although Boeing Alert Service Bulletin 737-57A1323, dated December 5, 2014, specifies to contact Boeing for repair instructions, and specifies that action as “RC” (Required for Compliance), this AD requires repair before further flight using a method approved in accordance with the procedures specified in paragraph (k) of this AD.

(k) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Los Angeles Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (l) of this AD. Information may be emailed to: 9-ANM-LAACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Los Angeles ACO, to make those findings. To be approved,

the repair method, modification deviation, or alteration deviation must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(4) Except as required by paragraph (j)(2) of this AD: For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (k)(4)(i) and (k)(4)(ii) apply.

(i) The steps labeled as RC, including substeps under an RC step and any figures identified in an RC step, must be done to comply with the AD. An AMOC is required for any deviations to RC steps, including substeps and identified figures.

(ii) Steps not labeled as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the RC steps, including substeps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

(l) Related Information

For more information about this AD, contact Jennifer Tsakoumakis, Aerospace Engineer, Airframe Branch, ANM-120L, FAA, Los Angeles ACO, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5264; fax: 562-627-5210; email: jennifer.tsakoumakis@faa.gov.

(m) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Boeing Alert Service Bulletin 737-57A1323, dated December 5, 2014.

(ii) Reserved.

(3) For Boeing service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>.

(4) You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on January 25, 2016.

Michael Kaszycki,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

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